

## **What is claimed is:**

**(Claim 1)** A smart airbag monitored by a vehicle restraint control module comprising:

at least one state sensor generating an airbag state signal; and  
a smart airbag fault circuit coupled to the at least one state sensor and comprising:

a plurality of state devices, each of which having at least one characteristic that is indicative of a state of the smart airbag, said plurality of state devices configured to be monitored by the vehicle restraint control module; and  
a smart airbag state monitor, separate from the vehicle restraint control module, coupled to said plurality of state devices, and altering said state in response to said airbag state signal.

**(Claim 2)** A smart airbag as in claim 1 further comprising a plurality of trigger devices configured to be monitored by said vehicle restraint control module.

**(Claim 3)** A smart airbag as in claim 2 wherein said plurality of trigger devices comprise at least one of said plurality of state devices.

**(Claim 4)** A smart airbag as in claim 1 wherein said plurality of state devices comprise a plurality of resistive state indicators.

**(Claim 5)** A smart airbag as in claim 1 further comprising a switch coupled to said plurality of state devices, said state monitor altering state of said switch in response to said airbag state signal.

**(Claim 6)** A smart airbag as in claim 5 wherein said switch comprises a first position associated with a first state device and a second position associated with a second state device.

**(Claim 7)** A smart airbag as in claim 1 wherein at least one of said plurality of state devices is a trigger device.

**(Claim 8)** A restraint control system comprising:

an airbag module internal sensor generating an airbag state signal;

a plurality of airbag state devices coupled to and having characteristics indicative of a state of an airbag;

a restraint control module monitoring said plurality of state devices; and

an airbag state monitor separate from said restraint control module, coupled to said plurality of airbag state devices, and altering said state in response to said airbag state signal.

**(Claim 9)** A system as in claim 8 further comprising a plurality of trigger devices coupled to said airbag and comprising at least one of said plurality of state devices.

**(Claim 10)** A system as in claim 9 wherein said plurality of trigger devices are resistive.

**(Claim 11)** A system as in claim 9 wherein said plurality of trigger devices comprise at least one resistor.

**(Claim 12)** A system as in claim 9 wherein each of at least two of said plurality of trigger devices have a resistance of approximately 2 Ohms.

**(Claim 13)** A system as in claim 9 wherein said plurality of trigger devices comprise:

a first trigger device with a first resistance; and

a second trigger device with a second resistance that is different than said first resistance.

**(Claim 14)** A system as in claim 8 wherein said state monitor in altering state alters a coupling between said plurality of state devices and said restraint control module.

**(Claim 15)** A system as in claim 8 wherein said restraint control module generates a fault signal in response to said state.

**(Claim 16)** A system as in claim 8 further comprising a switch coupled to said plurality of state devices, said state monitor alters status of said switch in response to said airbag state signal.

**(Claim 17)** A system as in claim 8 wherein said airbag comprises said plurality of state devices.

**(Claim 18)** A method of indicating a state of an airbag to an airbag external restraint control module comprising:

monitoring the state of the airbag;

generating an airbag state signal via at least one air bag module internal sensor; and

providing an airbag state indication indicative of the state of the airbag to the airbag external restraint control module;

altering said airbag state indication via trigger devices of an airbag module internal state circuit in response to said airbag state signal.

**(Claim 19)** A method as in claim 18 further comprising generating an airbag fault signal in response to said indicative state.

**(Claim 20)** A method as in claim 18 wherein altering indicative state of the airbag comprises switching between a first state indicative device and a second state indicative device.